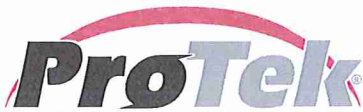




# > YHS 50 TU

Thermally Broken  
Impact Resistant and Blast Mitigating  
Storefront System for Insulating Glass



YKK AP Hurricane & Blast Solutions

## SYSTEM DESCRIPTION:

YHS 50 TU is a high performance storefront system designed for insulating glass 1" to 1-5/16" thick and tested to meet the most demanding conditions. With varied infill and components, YHS 50 TU can meet the requirements for Impact Resistance, Blast Mitigation or both. YHS 50 TU is thermally broken by means of a poured and debridged pocket that employs ThermoBond Plus® to greatly improve the adhesion of the polyurethane to the extruded aluminum. The system features the Model 95H entrance door with maximum-security dead bolts or optional exit devices for egress requirements.

## OPTIONS & FEATURES:

- Large & Small Missile
  - ◆ Small Missile is Dry Glazed
  - ◆ Large Missile Wet or Dry Glazed
- ASTM E 1886 / 1996, TAS 201 – 203
  - ◆ Tested to +/- 70 psf \*
  - ◆ Florida State-Wide Product Approval
  - ◆ Miami-Dade County Notice of Acceptance
- Blast Mitigation
  - ◆ "Low Hazard" per ASTM F 1642 Test @ 6 psi / 41psi-ms

\*Contact YKK AP Engineering for Job Specific Wind Load analysis at higher levels.



# > YHS 50 TU

## Thermally Broken Impact Resistant and Blast Mitigating Storefront System Specifications

### 1.01 SUMMARY

- A. Section includes: Aluminum Storefront Systems
  - 1. YKK AP Series YHS 50 TU Thermal Impact Resistant Storefront System (Insulated Glazing)
- B. Related Sections:
  - 1. Glass: Contact YKK AP for approved glass types.
  - 2. Glazing: Dow Corning® 995 Structural Silicone Adhesive for Large Missile.

### 1.01 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide aluminum storefront systems that meet all requirements of Florida Building Code Protocols TAS 201, TAS 202, TAS 203 and comply with the following specific performance requirements indicated.
    - 1. Air Infiltration: Completed storefront systems shall have 0.06 CFM/FT2 (1.10 m3/h-m2) maximum allowable infiltration when tested in accordance with ASTM E 283 at differential static pressure of 6.24 psf (299 Pa).
    - 2. Water Infiltration: No uncontrolled water when tested in accordance with ASTM E 331 (or when required, field tested in accordance with AAMA 503) at test pressure differential of: 12 PSF (575 Pa). Fastener Heads must be seated and sealed against Sill Flashing on any fasteners that penetrate through the Sill Flashing.
    - 3. Wind Loads: Completed storefront system shall withstand wind pressure loads normal to wall plane indicated:
      - a. Exterior Walls:
        - 1) Positive Pressure: 70 psf.
        - 2) Negative Pressure: 70 psf.
    - 4. Deflection: Maximum allowable deflection in any member when tested in accordance with ASTM E 330 with allowable stress in accordance with AAMA Specifications for Aluminum Structures.
      - a. For spans less than 13'-6" (4.1m): L/175 or 3/4" (19.1mm) maximum.
      - b. For spans greater than 13'-6" (4.1m) but less than 40'-0" (12.2m): L/175 or L/240 + 1/4" (6.4mm).
    - 5. Thermal Movement: Provide for thermal movement caused by 180 degrees F. (82.2 degrees C.) surface temperature, without causing buckling stresses on glass, joint seal failure, undue stress on structural elements, damaging loads on fasteners, reduction of performance, or detrimental effects.
    - 6. Thermal Performance for YHS 50 TU shall be:
      - a. Condensation Resistance Factor (CRF): A minimum of 59 when tested in accordance with AAMA 1503.1.
      - b. Thermal Transmittance U-Factor: 0.45 BTU/HR/FT2/°F or less when tested in accordance with NFRC 102.
- Note: Thermal Performance for the glazed system as a whole will be affected by the characteristics of the glass specified.

### 2.01 MANUFACTURERS

- A. Acceptable Manufacturers: YKK AP America Inc.
  - 1. Storefront System: YKK AP YHS 50 TU Impact Resistant Storefront System.
- B. Storefront Framing Systems:
  - 1. Description: Center set, exterior flush glazed; jambs and vertical mullions continuous; head, sill, intermediate horizontal attached by screw spline joinery. Continuous and wept sill flashing.
  - 2. Components: Manufacturer's standard extruded aluminum mullions, entrance doors, framing, and indicated shapes, perimeter anchor fillers and steel reinforcing as required.
  - 3. Glazing: Manufacturer's standard glazing stops with EPDM glazing gaskets to prevent water infiltration at the exterior and Dow Corning® 995 Structural Silicone Adhesive with fixed stops at the interior.
  - 4. Thermal Barrier: Provide continuous thermal barrier by means of a poured and debridged pocket consisting of a two-part, chemically cured high density polyurethane which is bonded to the aluminum by YKK AP ThermoBond Plus®. Systems employing non structural thermal barriers are not acceptable.

### 2.02 MATERIALS

- A. Extrusions: ASTM B 221 (ASTM B 221M), 6063-T5 Aluminum Alloy.

### 2.03 ACCESSORIES

- A. Manufacturer's Standard Accessories:
  - 1. Fasteners: Zinc plated steel concealed fasteners; Hardened aluminum alloys or AISI 300 series stainless steel exposed fasteners.
  - 2. Glazing: Setting blocks, edge blocks, and spacers in accordance with ASTM C 864, shore durometer hardness as recommended by manufacturer; Glazing gaskets in accordance with ASTM C 864.
  - 3. 0.050 Aluminum Sill Flashing End Dams must have 3 point attachment.

### 2.06 FINISHES

- A. Anodic Coating: Electrolytic color coating followed by an organic seal applied in accordance with the requirements of AAMA 612.
- B. High Performance Organic Coating Finish: Factory applied two-coat 70% Kynar resin by Arkema or 70% Hylar resin by Solvay Solexis, fluoropolymer based coating system, Polyvinylidene Fluoride (PVF-2), applied in accordance with YKK AP procedures and meeting AAMA 2605 specifications.

For additional information on architectural aluminum products offered by YKK AP America Inc. visit our web site at [www.ykkap.com](http://www.ykkap.com).





# Rochester Insulated Glass, Inc.

73 Merrick Circle, P.O. Box 168, Manchester, New York 14504

(585) 289-3611 Fax (585) 289-3610

Web Site: [www.rochesterinsulatedglass.com](http://www.rochesterinsulatedglass.com)

Sales E-mail: [sales@rochesterinsulatedglass.com](mailto:sales@rochesterinsulatedglass.com)



## Product Data

Company:: Mullets Aluminum Products

Project:: Orlando VA

Product:: 1 5/16" IG

(1/4" Solarban 70XL #2 - 1/2" AS - 1/4" Bronze - 090 PVB - 1/4" Clear) ✓

Physical Property Data::

Visible Light Transmission	37%	
"U" Value	Summer	.26 ✓
	Winter	.28 ✓
Solar Heat Gain Coefficient		.26 ✓
Shading Coefficient		.29

Note:: Tempered, Heat Strengthened, and Annealed are all the same physical properties for the above data.

Note:: All Insulated Glass RIG produces carries a 10 year warranty.

Note:: RIG Secondary Seal on Insulated Glass is GE # IGS 3103

Note:: This data is based upon Pre-Processed Product.

**SHOP DRAWING / SUBMITTAL REVIEW**  
☒ APPROVED ☐ APPROVED WITH CHANGES NOTED  
☐ REJECTED  
**SUBMITTAL** WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOB SITES FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF HIS WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS.  
BY: Colin J. [Signature]  
DATE: 01/14/2014  
**ORLANDO VA-FMS**

## Architectural Flat Glass Products

**Tempered • Laminated • Insulated • Ceramic frit Spandrels • Fabrication • Oversized**

### CERTIFICATE OF COMPLIANCE

THIS CERTIFICATE OF COMPLIANCE WARRANTS THAT THE SAFETY GLAZING MATERIAL DESCRIBED HEREIN WAS PRODUCED BY RIG AND CONFORMS TO THE CONSUMER PRODUCT SAFETY COMMISSION STANDARD 16CFR-1201-CII.



## Rochester Insulated Glass, Inc.

73 Merrick Circle, P.O. Box 168, Manchester, New York 14504

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Sales E-mail: [sales@rochesterinsulatedglass.com](mailto:sales@rochesterinsulatedglass.com)



### ***Product Data***

Company:: Mullets Aluminum Products

Project:: Orlando VA

Product:: 1 5/16" IG

(1/4" Bronze – 1/2" AS – 1/4" Solarban 70XL #3 – 090 PVB – 1/4" Clear)

#### Physical Property Data::

Visible Light Transmission		37%
"U" Value	Summer	.26
	Winter	.28
Solar Heat Gain Coefficient		.26
Shading Coefficient		.29

Note:: Tempered, Heat Strengthened, and Annealed are all the same physical properties for the above data.

Note:: All Insulated Glass RIG produces carries a 10 year warranty.

Note:: RIG Secondary Seal on Insulated Glass is GE # IGS 3103

Note:: This data is based upon Pre-Processed Product.

### **Architectural Flat Glass Products**

**Tempered • Laminated • Insulated • Ceramic frit Spandrels • Fabrication • Oversized**

#### CERTIFICATE OF COMPLIANCE

THIS CERTIFICATE OF COMPLIANCE WARRANTS THAT THE SAFETY GLAZING MATERIAL DESCRIBED HEREIN WAS PRODUCED BY RIG AND CONFORMS TO THE CONSUMER PRODUCT SAFETY COMMISSION STANDARD 16CFR-1201-CII.



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY  
AFFAIRS (PERA)

BOARD AND CODE ADMINISTRATION DIVISION

## NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599

[www.miamidade.gov/pera/](http://www.miamidade.gov/pera/)

Solutia Inc.

730 Worcester Street  
Springfield, MA 01151

**SCOPE:** This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA -Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

### DESCRIPTION: Saflex Clear and Color Glass Interlayers

**APPROVAL DOCUMENT:** Drawing No. 1813, titled "Saflex Based Interlayers for Laminated Glass" sheets 1 through 3 of 3, dated 04/06/2012, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: None

**LABELING:** Glass laminated under this product approval shall be permanently marked in a corner of the glass with: a) Saflex, b) Authorized laminator's name, c) M.D.C.A. that stands for Miami Dade County Approved and d) Markings required by federal law for safety glazing.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises NOA # 11-0325.05 and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.



*Carlos M. Utrera*  
06/06/2012

NOA No. 11-1102.11  
Expiration Date: May 21, 2016  
Approval Date: June 14, 2012  
Page 1

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Drawing No. **1813**, titled "Saflex Based Interlayers for Laminated Glass" sheets 1 through 3 of 3, dated 04/06/2012, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

**B. TESTS "Submitted under NOA # 11-0325.05"**

	Test Report No.	Standard	Date	Signature
1.	ETC-11-726-25078.0	ASTM D1929/D2843	03/08/11	Joseph L. Dolden, P.E.
2.	ETC-11-726-25076.0	ASTM D1929/D2843	03/08/11	Joseph L. Dolden, P.E.
3.	ETC-11-726-25080.0	ASTM D1929/D2843	03/08/11	Joseph L. Dolden, P.E.
4.	ETC-11-726-25077.0	ASTM D1929/D2843	03/08/11	Joseph L. Dolden, P.E.
5.	ETC-11-726-25079.0	ASTM D1929/D2843	03/08/11	Joseph L. Dolden, P.E.
6.	ETC-11-726-24882.0	ASTM D1929/D2843	03/08/11	Joseph L. Dolden, P.E.
7.	ETC 96-191-3253.0	ASTM G26 & C158	11/05/97	Joseph L. Dolden, P.E.
8.	ETC 98-191-5523.0	ASTM G26 & C158	05/11/99	Joseph L. Dolden, P.E.

**"Submitted under NOA # 09-0223.05"**

9.	ETC-07-726-20120.0	ASTM D2843	07/17/08	Joseph L. Doldan, P.E.
10.	ETC-07-726-20120.0	ASTM D1929	07/17/08	Joseph L. Doldan, P.E.
11.	ETC-07-726-20120.0	ASTM D635	07/17/08	Joseph L. Doldan, P.E.
12.	ETC-07-726-20120.0	ASTM C158	07/17/08	Joseph L. Doldan, P.E.

**C. CALCULATIONS:**

1. None.

**D. QUALITY ASSURANCE**

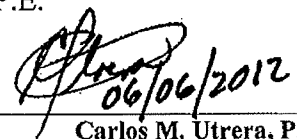
1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS**

1. Statement letter of code conformance to 2007 and 2010 FBC, issued by W. W. Schaefer Engineering & Consulting, P.A., dated 10/26/2011, signed and sealed by Warren W. Schaefer, P.E.
2. No financial interest letter issued by W. W. Schaefer Engineering & Consulting, P.A., dated 10/24/11, signed and sealed by Warren W. Schaefer, P.E.



06/06/2012

Carlos M. Utrera, P.E.

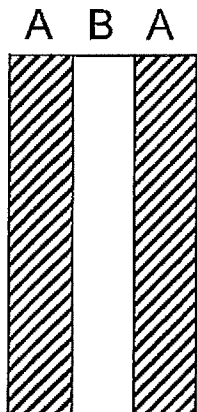
Product Control Examiner

NOA No. 11-1102.11

Expiration Date: May 21, 2016

Approval Date: June 14, 2012





**SECTION**

## Saflex® PVB Interlayer

(clear &/or colored Saflex @35% – 50%)

### Product Description

Manufactured By: Solutia Inc.

Description: Clear or Colored monolithically extruded interlayers made of polyvinyl butyral resin and triethyleneglycol bis(2-ethyl hexanoate) plasticizer at concentrations between 35 and 50%. Interlayer is offered under the brand names of Saflex® and Vanceva® for lamination between a minimum of two glasses. A typical glazing is made of the following components (minimum thicknesses indicated - multiple plies of interlayers to be used as necessary):

A - 2.3 mm (3/32-in) Annealed Glass

B – 0.76 mm (0.030-in) Saflex® and/or Vanceva® Interlayers

### Product Properties

Description	Test	Saflex® @ 30% (2)
(1) Self-ignition temperature	ASTM D 1929	760 °F
(1) Smoke Density	ASTM D 2843	5%
(1) Rate of Burning	ASTM D635	< 25 mm mark (not reported)
(1) Time of Burning	ASTM D635	< 5 sec
(1) Extent of Burning	ASTM D635	0.31 in
(1) Avg Mod of Rupture	ASTM C158	(1) Weathering (3)

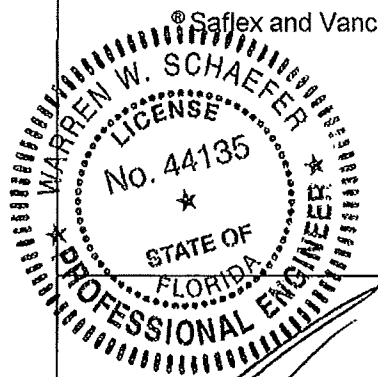
Before	After
2556 psi	2657 psi

- (1) Specimen: Laminated glass with Saflex® and/or Vanceva® interlayer  
 (2) Interlayer by itself (unprotected) does NOT comply with Florida Building Code  
 (3) Weathering per section 2612 of the Florida Building Code

® Saflex and Vanceva are registered trademarks of Solutia Inc.

**PRODUCT REVISED**  
 as complying with the Florida  
 Building Code  
 Acceptance No. 11-1102.11  
 Expiration Date 05/21/2016  
 By *[Signature]*  
 Miami Date Product Control

C	Combined Multi-layer and Saflex; removed IIIG name	12/12/11
B	Renewed Flammability test data	03/21/11
A	Combined RM & IIIG Products info one document	04/02/03
Rev #	Description	Date



APR 09 2012

Warren W. Schaefer, P.E.  
 Structural Engineer  
 P.E. No. 44135

#### Solutia Inc.

730 Worcester Street, Springfield, MA 01151  
 Phone: 413-730-3413 FAX: 508-861-0127

Title: **Saflex® Based Interlayers for Laminated Glass**

W.W. Schaefer Engineering & Consulting, P.A.  
 Structural Consulting Engineers  
 7480 150<sup>th</sup> Court North  
 Palm Beach Gardens, FL 33418  
 Phone: 561-744-3424

Drawing Number	Sheet Number	Drawing Date	Revisions Date
1813	1 of 3	04/06/12	

Saflex® PVB Interlayer continued

### Saflex® Multi-layer Product Properties

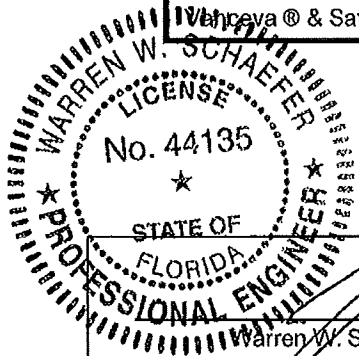
Footnote	Description	Test	Dade County Criteria	Saflex Multi-layer Series (2)
(1)	Test for Smoke Density	ASTM D 2843	Passed (<75%)	26.6%
(1)	Self Ignition Temperature	ASTM D 1929	Passed (>650°F)	750°F
(1)	Rate of Burning	ASTM D 635	Passed (C-1:<1.0 in/min)	---
(1)	Average Time of Burning	ASTM D 635	----	< 5 sec.
(1)	Average Extent of Burning	ASTM D 635	----	0.51 in
(1) & (3)	Average Modulus of Rupture	ASTM C 158	Passed (<10.0%)	Delta:4.9% Before: 3842 psi After: 4042 psi

- (1) Specimen: Laminated glass with Saflex® Multi-layer interlayer  
 (2) Interlayer by itself (unprotected) does NOT comply with Florida Building Code  
 (3) Weathering per section 2612 of the Florida Building Code

### Saflex® and Vanceva® Solar/Color and Colorant Properties

Material Designation	Smoke Density Rating ASTM D 2843	Dade Notification #
Vanceva ® & Saflex® – Clear	5%	ETC-11-726-25079.0
Vanceva ® & Saflex® – White	20%	ETC-11-726-25076.0
Vanceva ® & Saflex® – Black	2%	ETC-11-726-25080.0
Vanceva ® & Saflex® – Blue	5%	ETC-11-726-25077.0
Vanceva ® & Saflex® – Yellow	9%	ETC-11-726-25079.0
Vanceva ® & Saflex® – Red	10%	ETC-11-726-24882.0

PRODUCT REVIEWED  
 as complying with the Florida  
 Building Code  
 Acceptance No. 11-1102.11  
 Expiration Date 05/21/2016  
 By *[Signature]*  
 Miami/Dade Product Control



APR 09 2012

#### Solutia Inc.

780 Worcester Street, Springfield, MA 01151  
 Phone: 413-730-3413 FAX: 508-861-0127

Title: **Saflex® Based Interlayers for Laminated Glass**

W.W. Schaefer Engineering & Consulting, P.A.  
 Structural Consulting Engineers  
 7480 150th Court North  
 Palm Beach Gardens, FL 33418  
 Phone: 561-744-3424

Drawing Number	Sheet Number	Drawing Date	Revisions Date
1813	2 of 3	04/06/12	



Saflex® PVB Interlayer continued

Saflex® interlayers are known as Saflex, Saflex colors, Saflex Multi-layer, SilentGlass Technology™ and Vanceva® Color

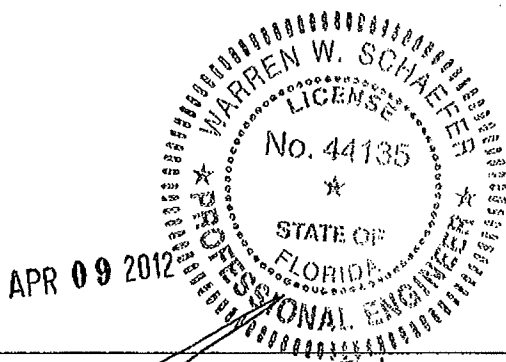
Vanceva and/or Saflex are known as: AR,CL,DA through DZ,,MG,NA,RA through RZ, SA through SZ, and VA through VZ. (e.g.: RB41, NA71).

Saflex® Multi-layer interlayers are known as: Q series (QA through QZ) and Silent Glass Technology (e.g.: QB 51, QS 41 etc...).

® Saflex and Vanceva are registered trademarks of Solutia Inc.

™ Silent Glass Technology is a trademark of Solutia Inc.

This is a component approval and does not include an evaluation of structural performance of this component. Systems incorporating this component shall apply for an NOA to the Miami-Dade Product Control and shall submit test reports and other required documents showing that the systems using this component will resist the loads according to chapter 16 of the F.B.C. A list of authorized laminators shall be filed with Miami- Dade County by Solutia Inc.



PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1102.11  
Expiration Date 05/21/2016  
By [Signature]  
Miami Dade Product Control

<p>Warren W. Schaefer, P.E. Structural Engineer P.E. No. 44135</p>	<p><b>Solutia Inc.</b> 730 Worcester Street, Springfield, MA 01151 Phone: 413-730-3413 FAX: 508-861-0127</p>			
<p>Title: <b>Saflex® Based Interlayers for Laminated Glass</b></p>				
<p>W.W. Schaefer Engineering &amp; Consulting, P.A. Structural Consulting Engineers 7480 150th Court North Palm Beach Gardens, FL 33418 Phone: 561-744-3424</p>	<p>Drawing Number</p> <p>1813</p>	<p>Sheet Number</p> <p>3 of 3</p>	<p>Drawing Date</p> <p>04/06/12</p>	<p>Revisions Date</p>

## Product Information

# Silicone Sealants

DOW CORNING

## Dow Corning® 795 Silicone Building Sealant

### FEATURES

- Suitable for most new construction and remedial sealing applications
- Versatile – high performance structural glazing and weathersealing from a single product
- Available in 11 standard colors; custom colors also available

### BENEFITS

- Excellent weatherability – virtually unaffected by sunlight, rain, snow, ozone and temperature extremes of -40°F (-40°C) to 300°F (149°C)
- Excellent unprimed adhesion to a wide variety of construction materials and building components, including anodized, alodined, most coated and many Kynar®-1-painted aluminums<sup>2</sup>
- Ease of application – ready to use as supplied
- Ease of use – all-temperature gunnability, easy tooling and low-odor cure byproduct
- Meets global standards (Americas, Asia and Europe)

### COMPOSITION

- One-part, neutral-cure, RTV silicone sealant

☒ APPROVED

☐ REVISE AND RESUBMIT

### Neutral, one-part silicone sealant

### APPLICATIONS

- Structural and nonstructural glazing
- Structural attachment of many panel systems
- Panel stiffener applications
- Weathersealing of most common construction materials including glass, aluminum, steel, painted metal, EIFS, granite and other stone, concrete, brick and plastics

### TYPICAL PROPERTIES

Specification Writers: Please contact your local Dow Corning Sales Application Engineer or Dow Corning Customer Service before writing specifications on this product.

Method	Test	Unit	Result	
<b>As Supplied</b>				
ASTM C 679	Tack-Free Time, 50% RH	hours	3	
	Curing Time at 25°C (77°F) and 50% RH	days	7-14	
	Full Adhesion	days	14-21	
ASTM C 639	Flow, Sag or Slump	inches (mm)	0.1 (2.54)	
	Working Time	minutes	20-30	
	VOC Content <sup>1</sup>	g/L	28	
<b>As Cured – After 21 days at 25°C (77°F) and 50% RH</b>				
ASTM D 2240	Durometer Hardness, Shore A	points	35	
ASTM C 794	Peel Strength	lb/in (kg/cm)	32 (5.7)	
ASTM C 1135	Tensile Adhesion Strength			
		at 25% extension	psi (MPa)	45 (0.310)
		at 50% extension	psi (MPa)	60 (0.414)
ASTM C 719	Joint Movement Capability	percent	±50	
ASTM C 1248	Staining (granite, marble, limestone, brick and concrete)		None	
<b>As Cured – After 21 days at 25°C (77°F) and 50% RH followed by 10,000 hours in a QUV weatherometer, ASTM C 53</b>				
ASTM C 1135	Tensile Adhesion Strength			
		at 25% extension	psi (MPa)	35 (0.241)
		at 50% extension	psi (MPa)	50 (0.345)

As Cured – After 21 days at 25°C (77°F) and 50% RH followed by 10,000 hours in a QUV weatherometer, ASTM G 53

☐ APPROVED WITH COMMENTS

☐ REJECTED:

at 25% extension psi (MPa) 35 (0.241)  
at 50% extension psi (MPa) 50 (0.345)

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS. ONLY THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOB SITES FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF HIS WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS.

### DESCRIPTION

Dow Corning® 795 Silicone Building Sealant is a one-part, neutral-cure, architectural-grade sealant that easily extrudes in any weather and cures quickly at room temperature.

This cold-applied, non-sagging silicone material cures to a medium-modulus silicone rubber upon exposure to atmospheric moisture. The cured sealant is durable and flexible enough to accommodate ±50 percent movement of original joint dimension when installed

in a properly designed weatherseal joint. In a properly designed structurally glazed joint, the sealant is strong enough to support glass and other panel materials under high windload.

### APPROVALS/ SPECIFICATIONS

Dow Corning 795 Silicone Building Sealant meets the requirements of:

- Federal Specification TT-S-001543A (COM-NBS) Class A for silicone building sealants
- Federal Specification TT-S-00230C

<sup>1</sup>Kynar is a trademark of Atofina Chemicals Inc.

<sup>2</sup>Contact your local Dow Corning Sales Application Engineer for specifics.

(COM-NBS) Class A for one-component building sealants

- ASTM Specification C 920 Type S, Grade NS, Class 50, Use NT, G, A and O
- ASTM Specification C 1184 for structural silicone sealants
- Canadian Specification CAN2-19.13-M82

## COLORS

*Dow Corning 795 Silicone Building Sealant* is available in 11 colors: black, white, gray, limestone, bronze, sandstone, adobe tan, dusty rose, rustic brick, blue spruce and charcoal. Custom colors may be ordered to match virtually any substrate.

## HOW TO USE

Please consult the *Dow Corning Americas Technical Manual*, Form No. 62-1112, for detailed information on state-of-the-art application methods and joint design. Please contact your local Dow Corning Sales Application Engineer for specific advice.

## Preparation

Clean all joints, removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants or glazing compounds and protective coatings.

## Application Method

Install backing material or joint filler, setting blocks, spacer shims and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Primer is generally not required on non-porous surfaces, but may be necessary for optimal sealing of certain porous surfaces. A test placement is always recommended. Apply *Dow Corning 795 Silicone Building Sealant* in a continuous operation using positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment.) Before a skin forms (typically within 15 minutes), tool the sealant with light pressure to spread the sealant against the backing material and

joint surfaces. Remove masking tape as soon as the bead is tooled.

## HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT [WWW.DOWCORNING.COM](http://WWW.DOWCORNING.COM), OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

## USABLE LIFE AND STORAGE

When stored at or below 27°C (80°F), *Dow Corning 795 Silicone Building Sealant* has a shelf life of 12 months from the date of manufacture. Refer to product packaging for "Use By Date."

## PACKAGING

*Dow Corning 795 Silicone Building Sealant* is supplied in 10.3-fl oz (305-mL) disposable plastic cartridges that fit ordinary caulking guns, 20-fl oz (590-mL) sausages and 2- and 4.5-gal (7.5- and 17-L) bulk containers.

## LIMITATIONS

*Dow Corning 795 Silicone Building Sealant* should not be used:

- In structural applications without prior review and approval by your local Dow Corning Sales Application Engineer
- In below-grade applications
- When surface temperatures exceed 50°C (122°F) during installation
- On surfaces that are continuously immersed in water
- On building materials that bleed oils, plasticizers or solvents that may affect adhesion
- On frost-laden or wet surfaces
- In totally confined joints (the sealant requires atmospheric moisture for cure)
- If the sealant is intended to be painted (paints do not typically adhere to most silicone sealants)
- To surfaces in direct contact with food or other food-grade applications

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

## HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, [www.dowcorning.com](http://www.dowcorning.com), or consult your local Dow Corning Sales Application Engineer.

## LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

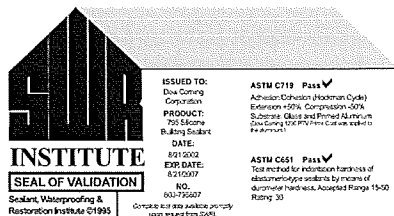
Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

## DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

## DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

A 20-year Weatherseal Limited Warranty is available. Some testing may be required. Consult your Dow Corning Sales Application Engineer for details.





# Product Information

## Silicone Sealants

DOW CORNING

## Dow Corning® 995 Silicone Structural Glazing Sealant

### FEATURES

- Odorless, non-corrosive cure system
- Cures to form an extremely tough elastomeric rubber ensuring a durable, flexible, watertight bond

### BENEFITS

- Excellent weatherability and high resistance to ultraviolet radiation, heat and humidity, ozone and temperature extremes
- Excellent mechanical properties
- Successfully tested for use in protective glazing applications
- Excellent unprimed adhesion to wide range of substrates including coated, enameled, and reflective glasses; anodized and polyester coated or painted aluminum profiles including most fluoropolymerbased paints such as Kynar™
- Meets global standards for structural glazing (American, China, Europe)

High ultimate tensile strength sealant ideally suited for structural bonding and protective glazing applications

### APPLICATIONS

- Silicone structural glazing and protective glazing applications

### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Method	Test	Unit	Result
As Supplied	Color		Black, gray, white
MIL-S-8802	Tack-Free Time, 50% RH	minutes	65
	Curing Time 25°C (77°F) at 50% RH	days	7-14
	Full Adhesion	days	14-21
	Flow, Sag, or Slump	inches	0.1
	Working Time	minutes	10-20
	Specific Gravity		1.339
	VOC Content <sup>1</sup>	g/L	30
As Cured – After 7 days at 25°C (77°F), 50% RH			
ASTM <sup>2</sup> D2240	Durometer Hardness, Shore A	points	40
ASTM D0412	Ultimate Tensile Strength	Psi (MPa)	350 (2.41)
	Ultimate Elongation	%	525
ASTM D0624	Tear Strength, die B	ppi	49
ASTM C0794	Peel Strength	ppi	40

### COMPOSITION

- One-part, neutral-cure elastomeric sealant

☐ REVISE AND RESUBMIT

☐ REJECTED:

As Cured – After 21 days at 25°C (77°F), 50% RH

ASTM C1135	Tensile at 25% Elongation	psi (MPa)	43 (0.30)
ASTM C1135	Tensile at 50% Elongation	psi (MPa)	65 (0.43)
	Ultimate Tensile Strength	psi (MPa)	170 (1.17)
ASTM C719	Joint Movement Capability	%	±50

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMANCE AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS. ONLY THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRECTING DIMENSIONS AT JOBSITE FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF HIS WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS.

### DESCRIPTION

Dow Corning 995 Silicone Structural Glazing Sealant is a one-component neutral-curing silicone sealant designed specifically for structural bonding applications of glass and metal in factory or field situations.

The rate of surface cure and cure-in-depth of most one-component RTV silicone sealants is affected by the temperature and humidity of the environment. However, an environment of high temperatures in combination with high humidity may slow the surface cure rate of Dow Corning 995 Silicone Structural Glazing Sealant.

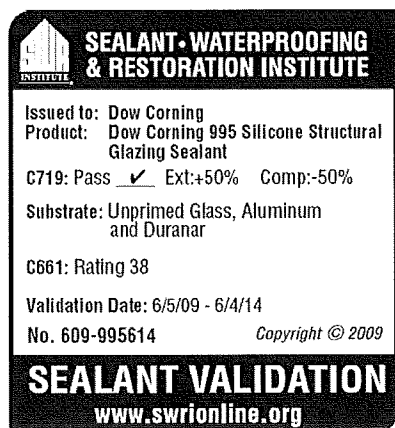
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DATE:

ORLANDO VA-FMS

## Colors

This product is available in black, gray, and white. Please contact your local Dow Corning Sales Application Engineer for availability.



## APPROVALS/ SPECIFICATIONS

*Dow Corning 995 Silicone Structural Glazing Sealant* has been internally tested and is designed to meet or exceed the test requirements of:

- Federal Specification TT-S-001543A (COM-NBS) Class A for silicone building sealant
- Federal Specification TT-S-00230C (COM-NBS) Class A for one-component building sealant
- ASTM Specification C-920 Type S, Grade NS, Class50, Use NT, G and A
- ASTM C1184 Standard Specification for Structural Silicone Sealant
- Chinese specification GB 16776 for structural glazing
- SNJF VEC

*Dow Corning 995 Silicone Structural Glazing Sealant* exhibits a high level of physical properties and adhesive performance, which are retained even after aging as detailed by EOTA ETAG 002 and prEN 13022 European Standards.

## HOW TO USE

Complete design and installation guidelines are contained in the Dow Corning Americas Technical Manual, Form No.62-1112. Specific advice is available from your local Dow Corning Sales Application Engineer.

### Preparation

Clean all joints and glazing pockets, removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants, or glazing compounds and protective coatings.

### Application Method

Install back-up material or joint filler, setting blocks, spacer shims, and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Primer is generally not required on non-porous surfaces, but may be necessary for optimal sealing of certain porous surfaces. A test placement is always recommended.

Apply *Dow Corning 995 Silicone Structural Glazing Sealant* in a continuous operation using a positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment.) Before ask informs (typically with in 10 minutes), tool the sealant with light pressure to spread the sealant against the backing material and joint surfaces. Remove masking tape as soon as the bead is tooled.

## HANDLING PRECAUTIONS

PRODUCT SAFETY  
INFORMATION REQUIRED FOR  
SAFE USE IS NOT INCLUDED IN  
THIS DOCUMENT. BEFORE  
HANDLING, READ PRODUCT  
AND MATERIAL SAFETY  
DATASHEETS AND CONTAINER  
LABELS FOR SAFE USE,  
PHYSICAL AND HEALTH  
HAZARD INFORMATION. THE  
MATERIAL SAFETY DATASHEET  
IS AVAILABLE ON THE  
DOW CORNING WEBSITE AT  
DOWCORNING.COM, OR FROM

YOUR DOW CORNING SALES  
APPLICATION ENGINEER, OR  
DISTRIBUTOR, OR BY CALLING  
DOW CORNING CUSTOMER  
SERVICE.

## USABLE LIFE AND STORAGE

When stored at or below 30°C (86°F) in the original unopened containers, this product has a usable life of 18 months from the date of manufacture.

## PACKAGING INFORMATION

This product is available in 305- and 310-mL (10.3- and 10.5-floz) disposable cartridges, 7.5-L (2-gal) pails, 17-L (4.5-gal) bulk containers, and 170-L (45-gal) drums, depending on location of purchase. Please contact your local Dow Corning Sales Application Engineer for packaging availability.

## LIMITATIONS

*Dow Corning 995 Silicone Structural Glazing Sealant* should not be applied:

- To building materials that bleed oils, plasticizers, or solvents—materials such as impregnated wood, oil-based caulks, green or partially vulcanized rubber gaskets or tapes
- In totally confined spaces as the sealant requires atmospheric moisture for cure
- When surface temperatures exceed 60°C (140°F)
- Where painting of the sealant is required, as the paint film may crack and peel
- To surfaces in contact with food—this sealant does not comply with Federal Food and Drug Administration food-additive regulations
- In below-grade applications
- For use as an interior penetration fire stop sealing system
- In horizontal floor joints where abrasion and physical abuse are likely to be encountered
- To frost-laden or damp surfaces
- For continuous immersion in water

This product is neither tested nor represented as suitable for medical or pharmaceutical uses. Dow Corning shall not be held liable for any possible claims arising from structural glazing use of this product for projects that have not been specifically approved by Dow Corning.

## **HEALTH AND ENVIRONMENTAL INFORMATION**

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, [www.dowcorning.com](http://www.dowcorning.com) or consult your local Dow Corning representative.

## **LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY**

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

**DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.**

**DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

*We help you invent the future.™*

[dowcorning.com](http://dowcorning.com)